

10/739453

11-13-08

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Docket No.: 60436 (70551)
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Letters Patent of:
Keita Hara, et al.

Patent No.: 7,409,266

Issued: August 5, 2008

For: GROUP ROBOT SYSTEM THAT CAN
OBTAIN DETAILED OVERALL
INFORMATION OF OBJECT EFFICIENTLY

REQUEST FOR CERTIFICATE OF CORRECTION

Attention: Certificate of Correction Branch
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Certificate
NOV 17 2008
of Correction

Dear Sir:

Upon reviewing the above-identified patent, Patentee has noted errors that occurred in the course of the printing of the above-identified US Patent No. 7,409,266 which should be corrected.

Specifically, the claims that appear in the printed patent document **are not** the claims as amended by the Examiner in his Examiner's Amendment that accompanied the Notice of Allowability in the above-identified application. Instead, the claims that appear in the printed patent document are the claims as Applicants proposed that they be amended in an Amendment After Allowance Under 37 CFR 1.312, which Amendment After Allowance Under 37 CFR 1.312 was denied by the Examiner after the above-identified US Patent had already been printed.

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Applicants called this discrepancy to the attention of the Examiner as soon as they became aware of the same, and after a consultation within the United States Patent and Trademark Office between the Examiner and others that was generally reported to Applicants' undersigned representative, the Examiner informed the Applicants' undersigned representative that the error by the United States Patent and Trademark Office in printing the wrong set of claims in the printed patent document in this case would have to be corrected by a Certificate of Correction requested by the Applicants but at the expense of the United States Patent and Trademark Office because it was an error by the United States Patent and Trademark Office that resulted in the wrong set of claims being printed in the printed patent document.

Accordingly, this Request for Certificate of Correction is being filed at the instruction of the Examiner for the purpose of correcting an error by the United States Patent and Trademark Office in the choice of the set of claims that would be (and were) printed in the printed patent document in this case.

Since the above-identified error occurred as a result of a mistake by the United States Patent and Trademark Office, it is Applicant's belief that no fee is required in connection with this Request for Certificate of Correction

However, should Applicant's belief concerning the necessity for the payment of a fee in connection with this Request for Certificate of Correction be in error or a fee otherwise be due in connection with this submission, please charge any such fee to the Deposit Account of the undersigned, Deposit Account No. 04-1105

Also, transmitted herewith is a proposed Certificate of Correction effecting the above-requested amendment.

The patentee respectfully solicits the granting of this Request for Certificate of Correction.

Dated: November 12, 2008

Respectfully submitted,

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Application No. (if known): 10/739,453

Attorney Docket No.: 60436(70551)

Certificate of Express Mailing Under 37 CFR 1.10

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It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected so as to read as follows:

Delete Claims 1-10 as printed in the above-identified patent document and substitute the following Claims 1-10 therefor:

1. A group robot system comprising a plurality of sensing robots,
and a control apparatus controlling (i) an operation of each of said plurality of sensing robots, and (ii) a definition of areas in which each of said plurality of sensing robots are respectively located relative to said control apparatus,
wherein said control apparatus responds to a detection of
an object by one of said plurality of sensing robots by providing
a control such that each of said plurality of sensing robots,
other than said sensing robot that has detected said object,
moves outside of the respective area relative to said control
apparatus in which it was located prior to the detection of the
object,

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wherein each of said plurality of sensing robots is equipped with the same sensor function and a predetermined sensor function level relative to the others of said plurality of sensing robots, said control apparatus responds to a detection of an object by one of said plurality of sensing robots (a) by providing a control such that another of said plurality of sensing robots that is equipped with a function level differing from the function level of said one of said sensing robots that detected said object conducts a further search for said object, and (b) by providing a control such that a sensing robot a sensing robot other than said one of said sensing robots that detected the object and said sensing robot conducting said further search moves outside of a respective area relative to said control apparatus in which it was located prior to the detection of the object.

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2. The group robot system according to claim 1, wherein

said control apparatus enables the predetermined sensor function level of a selected one of the plurality of sensing robots, and when said said selected one of said plurality of sensing robots having the enabled function level detects an object, said control apparatus enables the predetermined function level of another of said plurality of sensing robots that differs from the function level of said one of said plurality of sensing robots that detected the object so as to provide a control such that said another of said plurality of sensing robots conducts a further search for said object.

3. The group robot system according to claim 1, wherein

said relative sensor function levels of said plurality of sensing robots is determined by any of a sensing resolution, a sensor type, and a processing method of sensor information.

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4. The group robot system according to claim 1, wherein

said plurality of sensing robots and said control apparatus conduct communication in a hierarchical manner wherein said control apparatus has the highest level of hierarchy, and

said control apparatus responds to a detection of an object by

one of said plurality of sensing robots providing control such that said one of said plurality of sensing robots that has detected the object and a another of said plurality of sensing robots located at a hierarchical communication position between said

one of said plurality of sensing robots and said control apparatus that relays communication when hierarchical communication is conducted from said one of said plurality of sensing robots to said control apparatus moves outside a respective area relative to said control apparatus in which it was located prior to the detection of the object.

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5. The group robot system according to claim 1, wherein
said control apparatus includes a pheromone robot controlling travel of at least one
of said sensing robots,
and wherein said pheromone robot moves, when one of
said plurality of sensing robots detects an object, to a neighborhood of
said object.
6. The group robot system according to claim 1, wherein
said control apparatus includes a pheromone robot controlling travel of at least
one of said plurality of sensing robots,
said pheromone robot being responsive to a detection of an object by
one of said plurality of sensing robots so as to provide a control such
that another of said plurality of sensing robots different from the one of
said plurality of sensing robots that has detected said object moves to a
neighborhood of said pheromone robot.
7. The group robot system according to claim 1, wherein at least one of
said sensing robots is capable of fluttering flight by fluttering motion.

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8. A sensing robot capable of fluttering flight included

in a group robot system comprising a plurality of sensing robots and a control apparatus controlling (i) an operation of each of said plurality of sensing robots, and (ii) a definition of areas in which of each of said plurality of sensing robots are respectively located relative to said control apparatus, wherein said control apparatus responds to detection of an object by one of said plurality of sensing robots so as to provide a control such that another of said plurality of sensing robots moves outside the area relative to said control apparatus in which it was located prior to the detection of the object.

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wherein each of said plurality of sensing robots is equipped with the same sensor function and a predetermined sensor function level relative to the others of said plurality of sensing robots, said control apparatus responds to a detection of an object by one of said plurality of sensing robots (a) by providing a control such that another of said plurality of sensing robots that is equipped with a function level differing from the function level of said one of said sensing robots that detected said object conducts a further search for said object, and (b) by providing a control such that a sensing robot a sensing robot other than said one of said sensing robots that detected the object and said sensing robot conducting said further search moves outside of a respective area relative to said control apparatus in which it was located prior to the detection of the object.

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9. A base station included in a group robot system

comprising a plurality of sensing robots including at least one sensing robot capable of fluttering flight through a fluttering motion and a control apparatus controlling (i) an operation of each of said plurality of sensing robots, and (ii) a definition of areas in which each of said plurality of sensing robots are respectively located relative to said control apparatus,

wherein said control apparatus responds to a detection of an object by one of said plurality of sensing robots by providing a control such that each of said plurality of sensing robots, other than said sensing robot that has detected said object, moves outside of the respective area relative to said control apparatus in which it was located prior to the detection of the object, and

wherein said base station corresponds to said control apparatus,

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wherein each of said plurality of sensing robots is equipped with the same sensor function and a predetermined sensor function level relative to the others of said plurality of sensing robots, said control apparatus responds to a detection of an object by one of said plurality of sensing robots (a) by providing a control such that another of said plurality of sensing robots that is equipped with a function level differing from the function level of said one of said sensing robots that detected said object conducts a further search for said object, and (b) by providing a control such that a sensing robot a sensing robot other than said one of said sensing robots that detected the object and said sensing robot conducting said further search moves outside of a respective area relative to said control apparatus in which it was located prior to the detection of the object.

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10. A pheromone robot included in a group robot system

comprising a plurality of sensing robots including at least one sensing robot capable of fluttering flight through a fluttering motion and a control apparatus controlling (i) an operation of each of said plurality of sensing robots, and (ii) a definition of areas in which of each of said plurality of sensing robots are respectively located relative to said control apparatus,

wherein said control apparatus responds to a detection of an object by one of said plurality of sensing robots by providing a control such that each of said plurality of sensing robots, other than said sensing robot that has detected said object, moves outside of the respective area relative to said control apparatus in which it was located prior to the detection of the object, and,

wherein said pheromone robot controls travel of at least one of said plurality of sensing robots capable of fluttering flight through a fluttering motion.

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wherein each of said plurality of sensing robots is equipped with the same sensor function and a predetermined sensor function level relative to the others of said plurality of sensing robots, said control apparatus responds to a detection of an object by one of said plurality of sensing robots (a) by providing a control such that another of said plurality of sensing robots that is equipped with a function level differing from the function level of said one of said sensing robots that detected said object conducts a further search for said object, and (b) by providing a control such that a sensing robot other than said one of said sensing robots that detected the object and said sensing robot conducting said further search moves outside of a respective area relative to said control apparatus in which it was located prior to the detection of the object.

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